THE CLAIMS

What is claimed is:

1. A method for making a modified, stable industrial-baker's-yeast which comprises:

selecting a yeast having a desired property based on a recessive allele;

diploidizing the selected yeast and selecting a homozygous mating type from the diploidized yeast;

diploidizing an industrial baker's yeast and selecting a homozygous mating type from the diploidized industrial baker's yeast;

mating the diploidized yeast and the diploidized industrial baker's yeast having an opposite mating type to obtain a tetraploid zygote;

sporulating the tetraploid zygote; and

selecting the sporulated zygote strains exhibiting the desired property to provide the modified stable industrial baker's yeast having the desired property.

2. The method of claim 1, wherein the desired property comprises at least one of increased biomass production, cell separation, or drying, during at least one of yeast dough production, storage, or baking so as to improve performance of the industrial baker's yeast.

3. The method of claim 1, wherein the desired property comprises an lti-property.

4. The method of claim 1, wherein the recessive allele includes at least one gene which comprises a catabolite repressor gene, a gene coding for neutral or acid trehalase, a gene coding for a biosynthetic enzyme, or a gene that in allelic form(s) leads to an lti-property.

5. The method of claim 1, wherein the sporulated zygote strains exhibiting the desired property with an opposite mating type are mated.

6. A baker's yeast obtained by the method of claim 1.

7. A stable, modified industrial baker's yeast comprising a sporylated tetraploid zygote yeast having at least one property which is modified from that of a conventional industrial baker's yeast.

8. The baker's yeast of claim 7, wherein the baker's yeast is diploid or tetraploid.

9. The baker's yeast of claim 7, wherein the modified property is an lti-property.

10. The baker's yeast of claim 9, wherein the lti-property is characterized by having a CO_2 production of less than about 3 ml / g dough per hour at refrigeration temperatures from about 3°C to 12°C.

11. The baker's yeast of claim 10 wherein the CO_2 production profile of the baker's yeast is higher than the activity of a conventional industrial baker's yeast.

12. The baker's yeast of claim 10, wherein the CO_2 production is less than about 1 ml/ g dough per hour.

13. The baker's yeast of claim 10, wherein the baker's yeast constitutively or inducibly expresses maltase.

14. The baker's yeast of claim 7, having accession number FCL 313 (NCIMB 41002), CL14 (NCIMB 41032), or CL18 (NCIMB 41033).

15. A dough composition comprising flour, water and at least one strain of the baker's yeast of claim 6.

16. A dough composition comprising flour, water and at least one strain of the baker's yeast of claim 7.

17. A method of preparing baked dough products which comprises:

providing the dough composition of claim 16; and

baking the dough composition to provide one or more baked dough products.

18. A method of preparing baked dough products which comprises:

combining flour, water and the baker's yeast obtained by the method of claim 1 to provide a dough composition; and

baking the dough composition to provide one or more baked dough products.